

REMARKS

The Examiner is thanked for the review of the patent application. Claims 1-21 are pending.

Objections to the Specification

In paragraph 37, the term “Fiber Channel” has been changed to “Fibre Channel” in accordance with the Examiner’s request. Also, in paragraph 33, the phrase “The return on the prestaging invention is good . . .” has been amended to “The return on the prestaging is good . . .” Applicants respectfully submit that the minor informalities have been corrected and request that the Examiner withdraw the objections to the specifications.

Rejections under 35 U.S.C. Section 103(a)

Claims 1-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yochai et al. (U.S. Patent No. 6721870)(“Yochai”) and in view of Kavipurapu (U.S. Patent Application Publication No. 2002/0042861)(“Kavpurapu”). This rejection is respectfully traversed for at least the reasons discussed below.

To provide a prima facie case of obviousness under section 103 rejection, the cited prior art must disclose or suggest all of the features of the claimed invention. Applicants respectfully submit that the cited prior art references do not disclose or

suggest all of the features of independent claims 1, 8, and 15. Consequently, Applicants respectfully submit that the Office has failed to provide a prima facie case of obviousness.

With respect to claims 1, 8, and 15, the claimed invention includes the feature of determining a relative change in the frequency of data access for a storage region in the system. The region as defined within the present patent application is a collection of multiple tracks where the region within a physical volume can be fixed or variable sized. The Office attempts to equate this feature with the cited teachings of Yochai which states that the higher the level of system activity, the higher the threshold. In making this suggestion, the Office attempts to equate the system activity as utilized by the cited portions of Yochai with the claimed feature of the frequency of access for a storage region. Applicants respectfully submit that this comparison is not supported by the cited portions of Yochai because according to Yochai, system activity includes global memory access times and processor utilization. Therefore, the cited portions of Yochai do not support the Office's suggestion that system activity includes access to a storage region. Applicants respectfully refer the Office to column 6, lines 44-48 of Yochai which are shown in pertinent part below:

Also included are system activity level parameters, including average (global memory) access time parameters 76 and processor utilization parameters 78, which are used by the short sequence prefetch process 72a to adjust the threshold 74 dynamically.

Therefore, as shown above, the system activity as contemplated by cited portions of Yochai are global memory access time parameters and processor utilization parameters

and does not describe any storage regions. Consequently, the portion of Yochai referenced by the Office does not disclose or suggest determining a relative change in the frequency of data access for a storage region in the system.

Moreover, Applicants respectfully submit that the cited portions of Yochai do not disclose or suggest the feature of determining whether to prestage data in the cache and the amount of data to prestage based on the determined relative change in access frequency. As discussed above, Applicants respectfully submit that Yochai teaches the concept of system activity determining the threshold level and does not include determining relative change in access frequency of tracks in a physical volume.

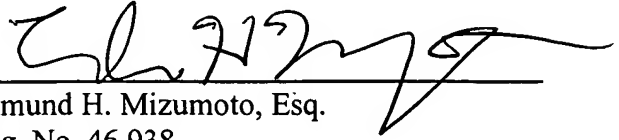
In addition, Applicants respectfully submit that the cited portions of Kavpurapu does not disclose or suggest the features as discussed above and does not remedy the deficiencies of Yochai as noted above. Therefore, Applicants respectfully submit that the cited portions of Yochai and Kavpurapu, individually or in combination, do not disclose or suggest all of the claimed features in claims 1, 8, and 15. Therefore, Applicants respectfully submit that the Office has failed to provide a prima facie showing of obviousness with respect to claims 1, 8, and 15. Applicants further respectfully submit that all of the dependent claims are allowable for at least the same reasons as the independent claims. Therefore, Applicants respectfully request that the section 103 rejection be withdrawn.

In view of the foregoing, Applicants respectfully submit that the pending claims are in condition for allowance. Accordingly, a notice of allowance is respectfully requested. Applicants believe that no fees are required in the filing of this paper.

U.S. Patent Application No. 10/652,997
Response to Office Action mailed on September 21, 2005
Amendment dated December 21, 2005

However, if it is determined that any fees are required for the filing of this paper, the
Commissioner is authorized to charge such fees to our Deposit Account No. 09-0441.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Edmund H. Mizumoto', is written over a horizontal line.

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